

AD-A113 832

NAVAL POSTGRADUATE SCHOOL MONTEREY CA
THE RESEARCH, DEVELOPMENT, TEST AND EVALUATION INCREMENTAL PROG--ETC(U)
DEC 81 C MERLO
NPS-54-81-016

F/G 5/1

UNCLASSIFIED

NL

1 OF 1
AD-A
13832

13832

END
DATE
FILMED
05-82
DTIC

NPS-54-81-016

2

NAVAL POSTGRADUATE SCHOOL

Monterey, California

AD A113832



THESIS

THE RESEARCH, DEVELOPMENT, TEST AND EVALUATION
INCREMENTAL PROGRAMMING POLICY AT DEPARTMENT
OF DEFENSE IN-HOUSE RDT&E ACTIVITIES

by

Carolyn Merlo

December, 1981

Thesis Advisor:

David Whipple

Approved for public release, distribution unlimited

Prepared for:
Naval Weapons Center
China Lake, California 93555

DTIC
ELECTE
S
APR 27 1982

E

82 04 27 076

DTIC FILE COPY

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER NPS-54-81-016	2. GOVT ACCESSION NO. AP-4113832	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) The Research, Development, Test and Evaluation Incremental Programming Policy at Department of Defense In-House RDT&E Activities		5. TYPE OF REPORT & PERIOD COVERED Master's Thesis December, 1981
7. AUTHOR(s) Carolyn Merlo		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS Naval Postgraduate School Monterey, California 93940		8. CONTRACT OR GRANT NUMBER(s)
11. CONTROLLING OFFICE NAME AND ADDRESS Naval Postgraduate School Monterey, California 93940		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) Naval Weapons Center China Lake, California 93555		12. REPORT DATE December, 1981
		13. NUMBER OF PAGES 92
		15. SECURITY CLASS. (of this report) Unclassified
		16. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release, distribution unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Research Development Test & Evaluation (RDT&E) Budgeting Incremental Programming Incremental Funding Appropriations		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The evolution of the Congressional "power of the purse" led to more Congressional control of the Research, Development, Test and Evaluation (RDT&E) appropriation. One method of control was the RDT&E Incremental Programming Policy. The impact and implementation of the Policy at Department of Defense in house RDT&E Activities is examined in this report. Questionnaires and interviews were used for research data.		

DD FORM 1 JAN 73 1473

EDITION OF 1 NOV 65 IS OBSOLETE
S/N 0102-014-6001

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE/When Data Entered

↓
Conclusions are that the RDT&E Incremental Programming Policy has had an impact at these Activities. However, administrative implementation within the Air Force, Army and Navy has had no major effect. Responses between the services to particular issues are different.
↑

Accession For	
NTIS GRA&I	<input checked="checked" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A	



UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE/When Data Entered

Approved for public release, distribution unlimited

The Research, Development, Test and Evaluation Incremental
Programming Policy at Department of Defense In-House RDT&E
Activities

by

Carolyn Merlo

B.A., Chapman College, 1977

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
December, 1981

Author:

Carolyn Merlo

Approved by:

D. E. S.

Thesis Advisor

Reuben T. Harris

Second Reader

[Signature]

Chairman, Department of Administrative Sciences

W. M. Woods

Dean of Information and Policy Sciences

ABSTRACT

The evolution of the Congressional "power of the purse" led to more Congressional control of the Research, Development, Test and Evaluation (RDT&E) appropriation. One method of control was the RDT&E Incremental Programming Policy. The impact and implementation of the Policy at Department of Defense in-house RDT&E Activities is examined in this report. Questionnaires and interviews were used for research data.

Conclusions are that the RDT&E Incremental Programming Policy has had an impact at these Activities. However, administrative implementation within the Air Force, Army and Navy has had no major effect. Responses between the services to particular issues are different.

TABLE OF CONTENTS

I.	INTRODUCTION	9
A.	BACKGROUND	9
B.	APPROPRIATIONS	10
C.	APPROPRIATION AND BUDGET CLASSIFICATION	12
D.	POLICY DESCRIPTION	13
	1. Congressional Intent	13
	2. Objective	13
	3. Characteristics	13
E.	ADVANTAGES AND DISADVANTAGES OF THE INCREMENTAL PROGRAMMING POLICY	14
	1. Advantages	16
	2. Disadvantages	17
	3. Summary	19
F.	RDT&E COMMUNITY INITIAL PERCEPTIONS	19
G.	RESEARCH OBJECTIVES	20
H.	THESIS OUTLINE	21
II.	RESEARCH METHODOLOGY	23
A.	GENERAL	23
	1. Managers Opinions	23
	2. Sponsors Opinions	24
	3. Headquarters Opinions	24
B.	QUESTIONNAIRE DEVELOPMENT	25
	1. Activities Surveyed	26
	2. In-House RDT&E Activities	26
	3. Sponsors/Administering Offices	27
	4. Preliminary Analysis of the Questionnaires	28

C.	INTERVIEWS TO DETERMINE HEADQUARTERS OPINIONS	29
III.	PRESENTATION OF RESEARCH FINDINGS	30
A.	SURVEY RESPONSE	30
1.	Questions Unique to RDT&E Financial Managers	33
2.	Questions Unique to RDT&E Sponsors/ Administrators	35
3.	Questions Common to RDT&E Financial Managers and Sponsors	36
4.	Questions Unique to RDT&E Financial Implementors	39
5.	Discussion of Survey Findings	41
6.	Summary	44
B.	HEADQUARTERS FINANCIAL MANAGEMENT INTERVIEWS	45
C.	CHANGES TO THE RDT&E INCREMENTAL PROGRAMMING POLICY	49
1.	Changes within Congress	49
a.	Background	50
b.	Issues	50
c.	Changes	50
2.	Changes within the Department of Defense	51
a.	Background	51
b.	Issues	52
c.	Changes	52
D.	ANALYSIS OF TWO METHODS FOR FUNDING RDT&E PROGRAMS	52
IV.	CONCLUSIONS	55
A.	GENERAL	55
B.	IMPACT OF THE RDT&E INCREMENTAL PROGRAMMING POLICY	55

C.	IMPLEMENTATION OF THE RDT&E INCREMENTAL PROGRAMMING POLICY	56
D.	SUMMARY	56
APPENDIX A	RDT&E Activities Surveyed	61
APPENDIX B	Questionnaires	69
APPENDIX C	Questionnaire Responses by Service	85
APPENDIX D	Questionnaire Response Rates by Service	89
LIST OF REFERENCES	90
INITIAL DISTRIBUTION LIST	91

LIST OF TABLES

Table 1	Questionnaire Distribution	28
Table 2	Questionnaire Respondents	32
Table 3	Financial Managers Responses	33
Table 4	Sponsor/Administrator Responses	35
Table 5	Financial Manager and Sponsor Responses	36
Table 6	Financial Implementors Responses	39

I. INTRODUCTION

A. BACKGROUND

The Research, Development, Test and Evaluation (RDT&E) appropriation is administered under the guidance of the Congressional Incremental Programming Policy (also known as the Incremental Funding Policy). The intent of the policy is that the programming and funding for new major weapons systems and other RDT&E development programs be formulated to pay for costs in one year increments. The initial funding increment will usually be for less than a full fiscal year. Upon approval, a second funding increment is provided for a full fiscal year. It is expected that in-house costs and contracts will be charged so they will comply with this policy. Exceptions to this policy for RDT&E funded programs are also provided in the Congressional Incremental Programming Policy.

Earlier reports have presented the advantages and disadvantages of the RDT&E Incremental Programming Policy. These will be discussed in this Chapter.

Dr. Albert G. Dancy, Sr. [Ref. 1] reported on the initial reactions of management within the Department of Defense at the major systems development centers in the Special Program Offices (SPOs) of the three major Services. Dr. Dancy's dissertation presented perceptions of the impact

of the RDT&E Incremental Programming Policy as it was in the process of being implemented. These perceptions are discussed in this Chapter. This thesis will assess the impact (if any) of the RDT&E Incremental Programming Policy at Department of Defense in-house RDT&E activities after nine years of experience. The scope of the impact survey includes several levels of management within the Army, Navy and Air Force. It also includes the perceptions of sponsors of RDT&E programs. Implementation of the RDT&E Incremental Programming Policy at Department of Defense in-house RDT&E activities is assessed.

B. APPROPRIATIONS

In the United States of America, Congress has the responsibility for the appropriation of funds. An appropriation is an annual Act of Congress which makes budget authority available for specified purposes and provides the authority to make payments out of the Treasury. The basis for this "power of the purse" is the United States Constitution [Ref. 2].

The United States Constitution did not define the system for implementing financial activities and for carrying out Congressional financial responsibilities. The financial laws, policies, and procedures currently in use have evolved from the basic authority delineated by the Constitution. For example, the United States Constitution states that all monies appropriated for military purposes will be available

for two years [Ref. 2]. This provision generally has been disregarded. Until fiscal year 1971, defense monies were appropriated and available for obligation until expended. These appropriations were known as "no year" funds.

As a part of the evolutionary financial control system determined by Congress, the "no year" fund system was abandoned. Congress has defined appropriations for specific purposes and has authorized appropriations for different, specified lengths of time.

Congress has made changes through legislation in carrying out the financial responsibility for appropriations. For example, three major changes were: (1) the consolidation of all prior year unobligated balances, (2) annual accrued expenditure limitations on appropriation accounts under certain conditions, and (3) the consideration of funds for rescission.

In fiscal year 1971, Congressional interest over its lack of control of funds following appropriation led to a change in the "no year" system of appropriation. The Department of Defense Appropriation Act of 1971 instituted the multiple year funding concept. Obligational availability was limited in length of time for appropriations. For Department of Defense appropriations, funding may be classified as full funding or incremental funding. The Research, Development, Test and Evaluation appropriation became a two year appropriation funded on an incremental (annual) basis.

The Department of Defense Authorization bill of 1972 imposed further restrictions on the funding for the RDT&E appropriation. These additional restrictions had the intent of providing Congress a greater review and control on Research and Development programs. This report will look at the impact of the RDT&E Incremental Programming Policy nine years after it was formulated.

C. APPROPRIATION AND BUDGET CLASSIFICATION

Congress appropriates Defense funds for a given fiscal year in an Appropriation Act. The principal subdivisions of the Appropriation Act are:

Title I	Military Personnel
Title II	Retired Military Personnel
Title III	Operation and Maintenance
Title IV	Procurement
Title V	Research, Development Test and Evaluation
Title VI	Special Foreign Currency Program
Title VII	General Provisions

Appropriation language has evolved over the years for each appropriation. The RDT&E Appropriation (Title V) reads:

For expenses necessary for basic and applied scientific research, development, test and evaluation, including maintenance, rehabilitation, lease, and operation of facilities and equipment, as authorized by law. . .

Research, Development, Test and Evaluation effort is further classified by the Department of Defense Budget Category VI. Within DOD Category VI, classifications have been established for major programs. These are:

1. Research
2. Exploratory Development
3. Advanced Development
4. Engineering Development
5. Management and Support
6. Operational Systems Development

D. POLICY DESCRIPTION

1. Congressional Intent

The intent of Congress was to satisfy the underlying goals of reduced costs and greater technical performance for RDT&E programs. These goals were to be achieved through greater financial control over the RDT&E budget and the use of RDT&E funds after they are appropriated.

2. Objective

The main objective of the RDT&E Incremental Programming Policy is that the funds provided by the RDT&E appropriation are used during the initial year of availability. It is intended that the policy will be applied to program formulation and execution. The policy includes provisions for in-house and contract performance of RDT&E effort.

Expenditure of RDT&E funds during the second year of the availability of the appropriation is authorized and legal. The two year availability is intended to provide flexibility for programs that cannot use the funds during the initial year.

3. Characteristics

Expenditures for RDT&E effort should be planned and costs should be incurred so they are lodged within the initial year of availability. The Congress has provided guidance for exceptions to this objective in four different environments: Short term contracts, multi-year contracts, research/educational institution contracts and government installations.

Within these environments, exceptions to the policy may be caused by delays in the start of an annual increment, the nature of a contract or technical problems. Figure 1 summarizes the desired and possible expenditure phasing plans possible for RDT&E funded programs as provided by Congressional guidance.

E. ADVANTAGES AND DISADVANTAGES OF THE INCREMENTAL PROGRAMMING POLICY

As noted earlier, the two ways to budget for programs are known as incremental programming (funding) or full funding policies. The advantages and disadvantages of the Incremental Programming Policy will be discussed in this section. The alternative to incremental programming, full funding, is discussed in Chapter III. The alternative of "no year" funding will not be addressed as the concept was abandoned in 1971 as discussed earlier.

The advantages and disadvantages of the incremental programming method must be discussed within the framework provided by the Constitutional responsibility of Congress for appropriations. All appropriations share certain restrictions. Regardless of the type or limitations of an appropriation, Congress has the Constitutional responsibility to annually determine National Defense priorities. The Department of Defense must defend its annual budget for expenditures regardless of the method of budgeting for a program. In other words, for any fiscal year, the Department

RDT&E INCREMENTAL FUNDING

	BY (CY) ONCJFMAMJJAS	BY+1 (BY) ONCJFMAMJJAS	BY+2 (BY+1) ONCJFMAMJJAS	COMMENT
Short-Term Contract				
Example 1	12 mos.			Coincident with the FY (objective).
Example 2	12 mos.			Not coincident with the FY.
Example 3	7 mos.			All effort within part of the FY.
Example 4		18 mos.		Award made late in FY; maximum permitted duration is 18 months.
Example 5			18 mos.	Award made in second year of availability; maximum permitted duration is 18 months. Budget cannot be based on this type of funding plan.
Multiyear Contract				
Example 6	12 mos.	12 mos.	12 mos.	Coincident with the FY (objective).
Example 7	7 mos.	12 mos.	12 mos.	First increment made to coincide with end of FY.
Example 8	12 mos.	7 mos.	12 mos.	Exception; Extension beyond FY requires SECNAV approval.
Example 9		9 mos.	12 mos.	Second increment made to coincide with end of FY.
Example 10			9 mos.	Exception; no coincidence with FY; extension into the following FY requires SECNAV approval.
Example 11		9 mos.	6 mos.	Award made in second year of availability; second increment funded in second year of availability, maximum duration is 6 months of the following FY. Budget cannot be based on this type of funding plan.
Research Contracts-Educational Institutions				
Example 11		36 mos.		Maximum duration of initial increment is 36 months from date of award.
Example 12		18 mos.	12 mos.	Maximum duration of any increment after the initial increment is 12 months from date of renewal.
Government Installation				
Example 13	12 mos.	12 mos.	12 mos.	Institutional funding.
Example 14	9 mos.	12 mos.	12 mos.	Reimbursable orders; planned increment may extend up to 3 months into the following FY.
Example 15		10 mos.	6 mos.	Reimbursable order issued in second year of availability; second increment funded in second year of availability, maximum duration is 6 months of the following FY. Budget cannot be based on this type of funding plan.

FIGURE 1

Sources:
Navcompt Manual

of Defense budget reflects only those costs that will be incurred in a fiscal year. Each year's expenditure plan is a discrete entity.

1. Advantages

Since the total amount of resources expected to be available at any given time is limited, it is undesirable to commit more than the resources reasonably required to pursue any given line of investigation. If excess resources are committed to one line of investigation, then another line of investigation must suffer so long as there are finite limits to the total resources available in any given period. [Ref. 3]

The nature of RDT&E work makes it hard to know exactly what method or system should be the final product. Technology changes can cause program redirection or cancellation. Because the funds are released for only one year instead of as a lump sum, the Government is able to limit costs for less desirable programs. Control over an incrementally funded program is based on the fact that expenditures are authorized for only one fiscal year at a time. This provides the advantage of ensuring that large amounts of funds are not released for programs that may no longer be desirable, but may otherwise be difficult to stop.

The authorization of RDT&E funds for only one year at a time applies to in-house effort and contractual effort. Contractual effort is negotiated for the entire development cycle of a program. However, contracts are usually funded on a cost reimbursable or level of effort terms. The contractor is reimbursed for all costs incurred in fulfilling his contractual obligation. The Government can readily

change the terms and conditions of the contract. The contractor is only authorized to spend the funds for an increment of the program's development during one fiscal year.

Through the Congressional Appropriation and Authorization Committees, development programs can be reviewed each year. This review provides Congress with the opportunity to review each program in relation to all the rest. Congress is able to monitor the progress of each program in relation to the expenditures. Funds appropriated for one program may be withdrawn and used to fund another program. In turn, this forces the Department of Defense to manage development programs in the same manner. The Department of Defense has the authority to redirect the expenditure of funds between programs; this is called "reprogramming." Reprogramming is also subject to Congressional review. The primary advantage of an incremental method is the managerial flexibility provided within each of the Services in the Department of Defense and at the Congressional level.

2. Disadvantages

The disadvantages of the RDT&E Incremental Programming Policy are experienced at organizational levels below the DOD and Congress. The application of the policy becomes a problem whenever funds are not available when they are needed for a program. The late receipt of funds can be caused by delays in Congressional release of the appropriation bill. Program technology changes, progress delays,

or contractual problems can also make it hard to live within the constraints imposed by the Incremental Programming Policy.

Any disruption to the funding schedule makes the program plan difficult to implement. It may become impossible to expend the funding for a full year in less than a full year. In some programs, the planned program tasks cannot be accomplished. Funding or schedule changes may result in unexpended funds remaining at the end of the fiscal year. Unexpended funds at the end of the fiscal year are vulnerable to withdrawal at all management levels within the DOD and by the Congress. If unexpended funds are withdrawn and the following year's funds are late, the program managers are not able to maintain program continuity between fiscal years.

It is possible to dispose of unexpended funds in three ways: (1) spend them on the program in the second year of availability, (2) reprogram the funds, and (3) revert the funds to the Treasury. At the Program Manager level, the first option is the only desirable one. At the Service level or DOD level the first and second options are the only desirable ones. The third option is not a desirable option within the Department of Defense, given present organizational and incentive structures.

The expenditure of RDT&E funds by contractors reveals additional problems in complying with an Incremental Programming Policy. For example, contracts for services are

supposed to be funded coincidentally with the fiscal year. If funds are not received at the start of a fiscal year by a program, the contractor also cannot be funded. A break in the performance of a service contract is difficult for the contractor and discourages small business contractors from undertaking Government contracts.

3. Summary

The incremental funding method provides management flexibility and control at the Congressional and Department of Defense levels. At Headquarters and Activity levels, Program Managers may not be able to apply the flexibility and control provided by incremental programming.

F. RDT&E COMMUNITY INITIAL PERCEPTIONS

Perceptions of the initial effect upon the RDT&E community were obtained at the time of the initial implementation and formulation of the Incremental Programming Policy. Dr. Dancy [Ref. 1] offered the following conclusions based on his studies of changes to the RDT&E appropriation:

As a result of the continuing evolution of Congressional financial management, the Department of Defense had expected changes to the budgeting process for RDT&E funds. However, the Incremental Programming Policy was somewhat of a surprise and was seen as a severe limitation upon the appropriation.

An initial problem was that the exact meaning of the Incremental Programming Policy was unclear. The application of the Incremental Programming Policy to contractors and

long lead time item procurement was an unresolved issue. The result was that compliance was hampered and delayed.

Compliance with the Incremental Programming Policy resulted in a considerable increase in administrative workload and reporting requirements. This was true within the Department of Defense and for RDT&E contractors. At the time of implementation, the Incremental Programming Policy did not affect relationships between program managers and contractors.

In summary, it was found that initial perceptions were mixed. Compliance resulted in tighter financial controls in the Department of Defense. Annual funding needs became more dependent on Congress.

G. RESEARCH OBJECTIVES

The basic question to be answered by the present research project is whether the RDT&E Incremental Programming Policy had an impact within the three major Services. The questions asked to determine this can be grouped into five general areas.

These areas are:

- (1) Did the financial managers and sponsors understand the RDT&E Incremental Programming Policy?
- (2) Did the RDT&E IPP provide better flexibility/information for planning and funding programs/resources?
- (3) Was compliance with the RDT&E IPP affected by factors beyond the respondents' control, did it affect their workload, and how much time did they spend ensuring compliance?

(4) Did respondents feel alternatives to the RDT&E Incremental Programming Policy were acceptable? Respondents were specifically asked whether or not full funding was an acceptable alternative.

(5) Were relationships and communications between organizational levels within their Service affected by the RDT&E Incremental Programming Policy?

The research also asked questions about the implementation of the RDT&E Incremental Programming Policy. These questions covered the following three areas:

(1) Were there any specific changes caused by implementation of the Incremental Programming Policy?

(2) Did compliance with the RDT&E Incremental Programming Policy result in additional cost/workload to the Activity?

(3) Was implementation guidance provided by the Activity's major claimant and within the Activity?

Appendix B contains copies of the questionnaires. Responses by major service are provided in Appendix C. Detailed presentation of questionnaire response rates is in Appendix D.

H. THESIS OUTLINE

Background information on the RDT&E Incremental Programming Policy, the RDT&E appropriation language, and the Incremental Programming Policy itself are presented in Chapter I. The objectives of the research are also included in Chapter I. Chapter II contains descriptions of the research methodology. Chapter III presents the research findings and analysis, as follows:

1. RDT&E Activity financial manager's opinions
2. Sponsor's opinions
3. Implementation responses
4. Headquarters financial manager's opinions
5. Changes to the RDT&E Incremental Programming Policy, and
6. Analysis of two methods for funding RDT&E programs.

Chapter IV contains a summary of the impact of the RDT&E Incremental Programming Policy and differences between the services or organizational levels. Chapter IV also provides a summary of the implementation survey. Overall conclusions based on the research are in Chapter V. A list of the RDT&E in-house Activities surveyed is provided in Appendix A. Copies of the questionnaires are in Appendix B. Appendix C presents cross tabulations of the responses by major Service category. Appendix D is a detailed presentation of the response rates to the questionnaires.

II. RESEARCH METHODOLOGY

As reported by Dr. Dancy, the RDT&E managers experienced some confusion and surprise over the severity of the RDT&E Incremental Programming Policy and the extent to which it was applied. The initial reaction resulted in additional work and compliance was initially delayed or hindered. For this report, questionnaires and interviews were used to determine whether the RDT&E Incremental Programming Policy had a long range impact on managers.

The approach to determining whether an impact had been made by the RDT&E Incremental Programming Policy and what the effects of implementation were on in-house RDT&E activities and their sponsoring/administering agencies consisted of those discussed under the following subheadings:

A. GENERAL

In order to obtain background information and to review current literature on incremental programming, a general literature search was conducted and the Defense Logistics Information System Exchange (DLSIE) data base queried. Dr. Dancy's dissertation, theses and magazine articles were reviewed to define the baseline situations for this work.

1. Managers Opinions

Four types of questionnaires were sent to activity managers, one for the Commander and Technical Director, two

for the Comptroller Department, and one for Cost Center Managers and Program Managers. An additional questionnaire was used to gather information about the implementation of the RDT&E Incremental Programming Policy. Some questions were common among the impact assessment questionnaires and the differences in responses were analyzed. Other questions were unique to each questionnaire respondent and were analyzed in terms of the specific problems faced by that respondent. The implementation questions were different from the impact questions. Results of the analysis are presented in Chapter III.

2. Sponsors Opinions

A fifth questionnaire was sent to sponsors (Headquarters Program Managers) at Administering Agencies for the three services. These Program Managers are the primary program administrators at Intermediate or Command levels of management. The questionnaire was designed to obtain the sponsor's opinions on the impact of the RDT&E Incremental Programming Policy. Results of the analysis are in Chapter III.

3. Headquarters Opinions

Personnel in these offices have produced directives and are responsible for guidance that helps to administer and interpret the RDT&E Incremental Programming Policy. These directives were reviewed and the personnel were interviewed to determine their current opinions about the RDT&E

Incremental Programming Policy. Chapter III presents the information obtained as a result of the interviews.

B. QUESTIONNAIRE DEVELOPMENT

Questionnaires were developed in order to determine if the RDT&E Incremental Programming Policy had an impact and to gather information about implementation of the Policy. The Community surveyed included the administering offices and the Department of Defense in-house RDT&E Activities.

The type of respondents chosen were: (1) personnel responsible for interpreting and providing guidance to others about the RDT&E IPP, (2) personnel in charge of RDT&E programs, (3) personnel administering funds to RDT&E programs, and (4) personnel who would be held accountable for any violations of the policy. The population surveyed are those who must "live with" RDT&E funds and RDT&E "financial rules."

It was felt that each questionnaire should be short and take no longer than fifteen minutes to complete. For ease of response, most questions provided a choice of three to five different responses. Space was provided for comments on each question. A preliminary set of questionnaires were tested at a major Navy RDT&E in-house Activity. Respondents were asked to answer the questions and to provide immediate reactions to the format and content of the questions during informal interviews.

Preliminary versions of the tested and revised questionnaires were reviewed by personnel at Headquarters levels

within the three major Services. Changes based on the field test and Headquarter's comments were incorporated into the final version of the questionnaires.

1. Activities Surveyed

One thousand questionnaires were sent to eighty in-house RDT&E Activities and Sponsors/Administering Commands. The one thousand questionnaires were composed of five different surveys. Four of the surveys contained questions about any impact of the RDT&E Incremental Programming Policy. The fifth survey contained questions about implementation of the RDT&E Incremental Programming Policy.

Each type of questionnaire contained ten or eleven questions. The survey was composed of thirty-one unique questions. The entire population described was surveyed. Any conclusions drawn in this report apply only to the population surveyed. Appendix A provides a list of Activities and Administering Offices surveyed.

2. In-House RDT&E Activities

The Department of Defense in-house RDT&E Activities are engaged in performing work in any or all of the categories of research, development, test and evaluation. In order to be considered as an in-house RDT&E Activity a minimum of twenty-five percent of the total effort performed must be RDT&E effort. Seventy-two Army, Navy, and Air Force Activities qualify as RDT&E Activities. Of the seventy-two, fifty Activities perform at least \$25 million of RDT&E

effort a year. These twenty-three Army Activities, thirteen Air Force Activities and fourteen Navy Activities were surveyed.

3. Sponsors/Administering Offices

Administering offices to the in-house RDT&E Activities consisted of both Intermediate and Management Commands. Sponsors (Program Managers) within the Administering Offices were surveyed.

Thirty administering offices/sponsors were sent ten questionnaires each to be distributed to program managers of programs planned for \$3 million and over in FY 1981. Fifty in-house RDT&E funded Department of Defense Activities were also sent ten questionnaires each to be distributed to program managers at the activity level. The fifty in-house RDT&E Activities were also sent one questionnaire each for the Commanding Officer, the Technical Director/Chief Scientist, the Comptroller and the financial implementor.

The questionnaires were distributed as follows:

TABLE 1

Questionnaire Distribution

Purpose	Respondent	AF	Army	Navy	Total
Impact	Administrators/ Sponsors	70	120	110	300
	Commanding Officers	13	23	14	50
	Technical Directors/ Chief Scientists	13	23	14	50
	Program Managers	130	230	140	500
	Comptrollers	13	23	14	50
Imple- mentation	Fin. Implementor	13	23	14	50
TOTAL		252	442	306	1,000

Administering offices/sponsors to be surveyed were determined on the basis of interviews with Headquarters personnel.

4. Preliminary Analysis of the Questionnaires

The responses to the questionnaires were recorded via video terminal and analyzed by using the Statistical Package for Social Sciences (SPSS). The SPSS program was used to provide frequencies, cross-tabulations and to compute the statistics for each question.

C. INTERVIEWS TO DETERMINE HEADQUARTERS OPINIONS

Interviews were conducted during the week of July 27, 1981 with Headquarters personnel in the three major services.

The personnel interviewed were in the following offices: (1) the Office of the Deputy Chief of Staff (Research, Development and Acquisition) in the Army; (2) the Office of the Comptroller of the Air Force; and (3) the Office of the Director of Laboratory Programs in the Naval Material Command. These personnel are responsible for preparation of RDT&E budgets for their respective services and for providing financial guidance to headquarters and field personnel. Personnel interviewed were asked to answer three questions about the RDT&E Incremental Programming Policy and to provide general comments about the policy.

The personnel interviewed were asked if they wanted to change or abandon the Policy. Affirmative responses were followed up with a request for details of what the respondent would like to see changed in the RDT&E IPP. The personnel interviewed were asked if they saw any trends in the future for "living with" the RDT&E IPP. A final question was asked about implementation costs or possible problems. Respondents were assured of their anonymity and were asked to freely express their opinions. The information obtained in the interviews is presented in Chapter III.

III. PRESENTATION OF RESEARCH FINDINGS

This section will present the research findings for this report. They will be presented as follows: (1) survey response, (2) interviews, (3) changes to the IPP, and (4) analysis of two RDT&E funding methods.

A. SURVEY RESPONSE

Four questionnaires were returned with "Do not know" marked at the top. These questionnaires were not included in the response tabulations. Three of these questionnaires were for Commander/Technical Director assessments and one was for a program manager assessment. Three groups of questionnaires were also not included in the response rate calculations as the questionnaires were returned without responses.

Financial managers returned 23.9% of the questionnaires; sponsors/administrators returned 20.4%; and, financial implementors returned 38.8%. The overall response rate was 23.6%. Due to the poor response rate, the survey statistics are not included in this report. See Appendix D for a more detailed presentation of the response rates. Within the services, the Navy had the poorest response rate. Navy sponsors/administrators had the lowest return rate. Air Force financial implementors had the highest rate of return. This is interesting as the Navy respondents that did answer

the questionnaires made many more comments than any of the other respondents. And, most of the comments that were made by the Navy respondents were negative. It was difficult to find any positive comments to any question from the Navy respondents.

A comparison of the distribution list and the questionnaire responses was made in order to determine the activities that had not responded to the survey. Follow up was made with six activities (two from each service) to see why the activities had not responded to the survey. Late receipt of the questionnaires and non receipt of the questionnaires were given as the reasons for the non response from the activities.

The following tables summarize responses to the questions from the survey. Questions are assigned question numbers 01 to 21 for impact questions and 41-50 for implementation questions. Appendix B indicates the coded question numbers in parentheses after the survey question number. Respondents were divided into the following groups: (1) commanding officers/technical directors/chief scientists, (2) comptrollers, (3) activity program managers, (4) headquarters sponsors/administrators, and (5) budget officer/accounting officers. Questions were asked as follows:

TABLE 2

Questionnaire Respondents

Respondents Question	CO/TD/Chief Scientist	Comptroller	Activity Prog. Mgr.	Sponsor/ Admnstr
01	X		X	X
02	X			
03	X	X		
04	X		X	
05	X	X	X	
06	X	X	X	X
07	X	X		
08	X	X		X
09	X	X		
10	X	X	X	X
11	X	X	X	X
12		X	X	X
13		X	X	X
14		X		
15			X	
16			X	
17			X	
18-21				X

Questions 41-50 were asked of accounting officers/budget officers.

1. Questions Unique to RDT&E Financial Managers

TABLE 3
Financial Managers Responses

	Frequency of Response (percent)		
	n	Agree	Disagree
Ques02 The IPP encourages RDT&E activities to use more rigorous/refined budgeting/planning methods.	26	50	46
Ques03 The RDT&E IPP takes away flexibility to change program plans and funding between fiscal years.	46	63	35
Ques04 The IPP is useful to you in managing your Activity's resources.	128	26	66
Ques05 Planning in one year increments can result in benefits to RDT&E funded activities.	147	32	57
Ques07 Infractions of the Policy may be unavoidable.	45	58	31
Ques09 Relationships and communications within your Activity have improved as a result of IPP.	46	17	63
Ques15 The IPP takes away flexibility to plan and fund programs between fiscal years.	102	72	20
Ques14 Compliance has resulted in the following change to workload: (n=20)			
	no effect	20	
	increase	70	
Ques16 Approximately how much of your time is spent ensuring compliance with the policy? (n=99)			
	up to 25%	85	
	over 25%	15	
Ques17 Have sponsors pressured you to change project plans to match the availability of RDT&E funds? (n=101)			
	Yes, often	54	
	Yes, sometimes	26	
	Rarely	8	

Comptrollers were almost evenly divided between agree/disagree with the statement that the IPP encourages RDT&E activities to use more rigorous/refined budgeting/planning methods. Sixty three percent of the commanding officers/technical directors/chief scientists and comptrollers responding agreed the IPP takes away the flexibility to change program plans and funding between fiscal years. Seventy-two percent of the activity program managers agreed with the statement. The following comment was made by a Navy activity program manager:

Often as a result of reduced funding levels after a research program has been initiated, a key engineer may be assigned to another task effort which has sufficient funding. The next year may find the original task at an increased funding level and the sponsor is unhappy when all the original people on his task are not available to work on the task.

The program manager's comment is reinforced by a sixty-six percent disagreement with the statement that the RDT&E IPP is useful to the respondents in managing their activity's resources. Fifty-seven percent of the respondents disagreed with the statement that planning in one year increments can result in benefits to RDT&E funded activities.

Fifty-eight percent of the respondents agreed with the statement that infractions of the policy may be unavoidable. A Navy comptroller made the following comment:

Best interests of the taxpayer, government and Navy may mandate disregarding the policy. Also, contract complexities get so great that mistakes inevitably happen and aren't seen.

Sixty-three percent of the respondents disagreed with the statement that relationships and communications with their activities had improved as a result of the policy. Seventy percent of the financial managers indicated that compliance with the IPP has increased workload. A Navy sponsor said:

RDT&E IPP has added a burden on program managers in that they must continually track funding to insure it is spent (work is done) in the year of the funds appropriation. If there is a schedule slippage, funds are removed from a contract and replaced with next FY monies.

Eighty-five percent of the respondents indicated they spent up to twenty-five percent of their time ensuring compliance with the policy. Eighty percent of the respondents indicated sponsors have pressured them to change project plans to match the availability of RDT&E funds.

2. Questions Unique to RDT&E Sponsors/Administrators

TABLE 4

Sponsor/Administrator Responses

	Frequency of Response (percent)		
	n	Agree	Disagree
Ques18 The RDT&E IPP makes it easy to fund contractual effort.	56	34	57
Ques19 The RDT&E IPP is a useful planning aid for you.	55	51	42
Ques20 Knowledge of the RDT&E IPP is useful when you are developing plans for the outyears.	56	73	21
Ques21 The RDT&E IPP has provided you with useful information to use in planning and budgeting.	54	35	50

Fifty-seven percent of the sponsors surveyed disagreed with the statement the IPP makes it easy to fund contractual effort. Fifty-one percent of the sponsors agreed the IPP is a useful planning aid to them. Seventy-three percent of the sponsors agreed that knowledge of the IPP is useful in developing outyear plans. An Air Force sponsor said:

The RDT&E IPP allows the budget analyst to budget only those dollars necessary to cover authorized commitments within the fiscal year. By carefully reviewing these activities more often than not new programs can be started and numerous reprogrammings can be done to cover cost growth, etc. This flexibility will provide data to cover unexpected costs without involving higher Headquarters.

Conversely, fifty percent of the sponsors disagreed with the statement the IPP has provided them with useful information to use in planning and budgeting.

3. Questions Common to RDT&E Financial Managers and Sponsors

TABLE 5
Financial Manager and Sponsor Responses

	Frequency of Response (percent)			
	Fin. Mgrs. n	A/D	Sponsors n	A/D
Ques01 I understand the RDT&E IPP.	129	84/ 9	57	84/12
Ques06 The ability of your activity to comply is often affected by factors beyond your control.	148	83/11	56	75/19
Ques08 In your opinion, alternatives to the RDT&E IPP are not acceptable.	45	33/58	56	31/52
Ques12 Many different rules cause confusion in applying the RDT&E IPP.	122	78/11	56	73/16

TABLE 5 (con't)

	Frequency of Response (percent)			
	Fin. Mgrs.		Sponsors	
	n	A/D	n	A/D
Ques13 A full funding policy is preferable to the RDT&E IPP.	121	69/24	56	62/32
Ques10 What effect has the IPP had upon relationships and communications?	n=142		n=56	
Caused problems	49		41	
Minimal effect	37		43	
Improved them	8		8	
Ques11 After several years of experience with the IPP, your opinion is that it:	n=145		n=50	
Should be retained as is	14		22	
Retain, but modify it	26		25	
Abandon it	44		42	

The respondents indicated they understood the RDT&E IPP. There were no significant differences in the responses between the services.

Although three questionnaires were returned from Commanders/Technical Directors with "do not know" written at the top, one made the following comment:

...I don't know what RDT&E IPP does for (Activity's name), either in a positive or negative form. I've been here two years and have heard no reference to the subject.

It would appear that lack of knowledge about the RDT&E IPP may be a reason for the low overall response rate to the survey.

The respondents agreed with the statement that the ability to their activities to comply with the IPP is often

affected by factors beyond their control. The respondents disagreed with the statement that alternatives to the IPP are not acceptable. They agreed with the statement that many different rules cause confusion in applying the policy. The respondents agreed a full funding policy is preferable to the RDT&E IPP. In all of the preceding questions, sponsors were somewhat more divided in their responses than financial managers.

Forty-nine percent of the financial managers and forty-one percent of the sponsors felt the IPP has caused problems. A greater percentage of sponsors (forty-three percent versus thirty-seven percent) felt the IPP has had minimal effect upon relationships and communications.

The majority of sponsors and financial managers felt the IPP should be abandoned or modified. It should be noted that twenty-two percent of the sponsors (versus fourteen percent of the financial managers) felt the IPP should be retained as is. The most optimistic comment on the IPP that was received was made by an Army sponsor:

No further comments needed. Let's keep it.

4. Questions Unique to RDT&E Financial Implementors

TABLE 6

Financial Implementors Responses

	Frequency of Responses (percent)	
	Yes	No
Ques42 Was there anything about your activity that made implementation of the RDT&E IPP difficult?	37	58
Ques43 Has implementation of the IPP changed how your Activity prepares budgets?	26	74
Ques44 Has your major claimant provided guidance on the RDT&E IPP?	90	10
Ques47 Has your Activity been cited for failure to comply with the IPP?	26	68
Ques49 Has the PPBS system improved at your activity with implementation of the RDT&E IPP?	11	68
Ques41 Compliance with the IPP is monitored by:		
The accounting system	21	
The procurement system	11	
Program managers	5	
More than two of the above	63	
Ques45 Has your activity provided guidance to:		
Program managers	11	
Cost center managers	11	
Both	67	
Ques46 Has compliance with the IPP resulted in additional cost to:		
Overhead or direct programs	52	
Neither	48	

Fifty-one percent of the financial implementors indicated there was nothing about their activities that made implementation of the IPP difficult. Seventy-four percent indicated implementation of the IPP did not change how their activities prepared budgets. Implementation guidance was provided by ninety percent of the respondent's major claimants. Sixty-eight percent of the responding activities had not been cited for failure to comply with the IPP. Of the twenty-six percent of the responding activities that had been cited for failure to comply (Question 48), the failure to comply was caused by two or more factors. Question 48 is not included in the above table as responses varied widely. Some of the reasons for failure to comply (asked for by question 48) were: late receipt of funds, lack of knowledge of the IPP, cost overruns, and differing interpretations of the policy. A Navy financial implementor made the following comment:

The Activity is trying to devise a way to comply--but with the intent of the requirements--too many aspects can't be followed at present and won't be until changes are made.

Sixty-eight percent of the financial implementors indicated that PPBS system did not improve with the implementation of the RDT&E IPP. Sixty-three percent of the respondents indicated that more than two organizations at their activities were responsible for monitoring compliance with the IPP. Respondents indicated that IPP guidance was provided to program managers and cost center managers at

sixty-seven percent of the activities. Response to whether compliance resulted in additional cost was almost evenly divided. Question 50 asked what percentage of funding in the current year was RDT&E funding for the responding activities. This was a check on the criteria established that each activity surveyed performed \$25 million or more of RDT&E effort in FY 1981. The activities surveyed did perform \$25 million or more of RDT&E effort in FY 1981.

5. Discussion of Survey Findings

a. RDT&E Activity Financial Managers

The financial manager has two goals. One is to do everything possible to ensure his Activity's mission objectives are accomplished. The other is to administer and monitor the expenditure of resources necessary to accomplish mission objectives. This second goal includes responsibilities in the accounting, technical, and contractual areas. The responses to questions unique to financial managers indicate the RDT&E IPP has created some problems in all these areas for financial managers.

The RDT&E IPP limits the flexibility available to program managers. For example, the IPP limits funds availability to one year at a time. This basic rule is not a problem unless it is violated. For various reasons (such as Congressional, Department of Defense, or Service deferrals) funds are not forwarded to the program managers at the start of a fiscal year. Sponsors/administrators

apply pressure to field activities to change program plans to match the availability of RDT&E funds. This can create in-house and contractual scheduling problems. It can also make it impossible for the financial managers to comply with the RDT&E IPP. Pressures upon the financial manager and program goals both force the program manager to expend funds in a manner not consistent with the RDT&E IPP. In turn, this can result in problems between different organizational levels within and without the Activity. Relationships and communications become strained. Each organization has its own goals which it is seeking to accomplish. The conflict between the organizations evolves from the incompatibility of conflicting goals.

b. Sponsors/Administrators of RDT&E Activities

A sponsor/administrator is usually located at a higher level within the chain of command. Several activities may be funded by a sponsor. The sponsor has more flexibility than a field activity. Reprogramming authority or the transfer of funds between Activities provide this flexibility. The responses by sponsors/administrators indicate that knowledge of the IPP is useful for planning purposes. At the sponsor/administrator level of command, planning is for at least five fiscal years at a time. Knowledge of the RDT&E IPP makes planning easier for sponsors/administrators.

In contrast, the responses obtained from the survey indicate that sponsors/administrators, in contracting

out programs, do not find the policy easy to apply. Contracts can be funded directly from the sponsor/administrator level or from the Activity level. The IPP requires that contractors work and bill costs in one year increments. The possible program cancellation, the billing systems required, and the technical expertise required for RDT&E programs usually mean that a contractor's plant must be fairly large. The difficulties involved in contracting out for RDT&E programs could be the reason sponsors/administrators feel the IPP does not make it easier to fund contracts.

The sponsors/administrators were more divided among themselves in answering questions about confusion over the different rules applicable to the IPP and full funding as an alternative. Their responses were still decidedly negative about the RDT&E IPP. The everyday application of the IPP rules is more crucial to financial managers than sponsors/administrators. A financial manager's daily program decisions can be affected by the IPP while the sponsor/administrator may be confronted with fewer, higher order decisions. This difference could account for the less sharply divided responses from sponsors/administrators.

c. RDT&E Activity Implementors

Financial implementors are budget officers, accounting officers, or other financial persons responsible for implementation of financial policies or rules. After nine years, implementors indicated the IPP has been

implemented. Guidance to and within activities has been issued. Financial implementors are concerned with implementing, monitoring, and advising others about policies and procedures. Implementors that provided comments reinforced the responses financial managers and sponsors made to impact questions. For example, an Army implementors made this general comment about the IPP:

If all RDT&E funds were released on 1 Oct each year IPP probably would not be too bad. The biggest problem is contracts. Our contracts go non-AIF, therefore, they are not obligated until signed by the contractor. Consequently, because of the uniqueness of (Activity's name), we run into many problems and some contracts do not get awarded by 30 September. Higher Headquarters (always looking for money) tries to take the funding away. This requires much effort on our part to justify retaining these funds.

6. Summary

The respondents to the survey were in agreement about the IPP and its impact. Some differences were shown in the frequency of individual response rates. Overall, responses to common questions/issues were the same for financial managers, sponsors, and financial implementors. It should be noted that although financial managers felt infractions of the IPP were unavoidable, only twenty-six percent of the financial implementors indicated their activities had been cited for failure to comply with the policy.

Implementation of the IPP has taken place at the responding activities without change to their method of budget preparations. The changes to activities noted by respondents were: loss of flexibility, an increase to

workload and costs, a need to monitor compliance, and a change to relationships and communications.

B. HEADQUARTERS FINANCIAL MANAGEMENT INTERVIEWS

Someone once told me many years ago...if you ask the three Services about any issue--this is what the responses will be:

Air Force: We have it all under control, no problem.

Navy: What does it really mean? It's a problem.

Army: Policy, what policy? We don't have a problem.

Headquarters Financial Managers were interviewed to obtain their opinions about the RDT&E Incremental Programming Policy. Three specific questions were posed to the managers. General comments about the RDT&E Incremental Programming Policy were then solicited. The questions asked were:

1. Would you like to see the RDT&E Incremental Programming Policy remain the same, changed or abandoned? If changed or abandoned--to what?
2. What do you see as any future trend within your Service towards "living" with the RDT&E Incremental Programming Policy?
3. Has implementation of the RDT&E Incremental Programming Policy cost anything (such as funding, manpower or program delays)? Has implementation been without problems?
4. Do you have any general comments about the RDT&E Incremental Programming Policy?

A summary of the findings obtained during these interviews in response to the four primary questions follows:

Inquiry as to whether any change should be made to the RDT&E Incremental Programming Policy:

The Air Force response to this question was that, due to the nature of RDT&E effort, funding must be made on a yearly basis. The respondent felt RDT&E effort should be justified each year because the future of a program is unknown and the RDT&E Incremental Programming Policy should remain the same.

The Navy response to this question was that programs should be given the widest range of flexibility possible. The respondent felt that (if it were possible) the RDT&E appropriation should revert to a "no year" appropriation. The respondents felt that along with the abandonment of the RDT&E Incremental Programming Policy and the two year appropriation limitations, Program Managers must have the responsibility for ensuring the funds are spent in a timely fashion.

The Army response to this question was that the RDT&E Incremental Programming Policy did not actually cause any impact upon programs. The respondent felt the Incremental Programming Policy was not usually followed or enforced. The respondent felt the RDT&E appropriation should stand as a two year appropriation. The respondent felt that one must question the utility of the Incremental Programming Policy and that the Incremental Programming Policy can actually be detrimental to programs in some cases. An example of the questionable utility of the Incremental Programming Policy was given. The Small Business Administration requires that certain technology area contracts be

awarded to Small Business contractors. Small business contractors do not have the accounting facilities or capital available to break up work performance and billings as required by the RDT&E Incremental Programming Policy. The government contracting office is then in the position of being required to contract out to a Small Business contractor who cannot comply with the requirements of the Incremental Programming Policy.

Inquiry regarding any future trends in living with the RDT&E Incremental Programming Policy:

The Air Force response to this question was that the RDT&E Incremental Programming Policy has practically eliminated all forward financing and that the Air Force would continue to adhere to the Policy. Concern about the disbursement rate of RDT&E funds was seen as an ongoing problem. The respondent felt that funding reductions were made on the basis of inadequate disbursement rates.

The Navy response to the question was that the interpretation of the RDT&E Incremental Programming Policy has been too strict. It was felt the RDT&E appropriation would have been made a one year appropriation if that had been the intent of Congress. The respondent felt the Navy interpretation of the IPP would be rewritten and would eliminate some of the current confusion. In particular, differences between programming and execution would be addressed. The enforcement of the RDT&E Incremental

Programming Policy as applied to service contracts was also seen as a future issue that requires clarification.

The Army response to any future trends was that the RDT&E Incremental Programming Policy would continue to not really be enforced. Losing program funds for bureaucratic reasons was seen as a future concern in living with the Policy.

Inquiry whether the RDT&E Incremental Programming Policy has caused any implementation problems or costs:

The Air Force respondent felt that implementation has probably caused some programs to be cancelled. However, the respondent felt that overall the RDT&E Incremental Programming Policy has not affected programs.

The Navy response to this inquiry was that implementation of the RDT&E Incremental Programming Policy has led to additional costs. The implementation costs are the result of time spent trying to understand what is desired by the Congress. The respondent felt that different interpretations of the RDT&E Incremental Programming Policy have led to a waste of taxpayer, contractor, auditor and in-house resources. For example, one interpretation would lead to the treatment of the RDT&E appropriation as a one year appropriation. Another interpretation would lead to the treatment of the RDT&E appropriation as a two year appropriation to be administered so that a contract could be obligated for one year, regardless of the starting date.

The Army response to this question was that future trends are probably difficult to foresee at the Headquarters level.

Inquiry for general comments about the RDT&E Incremental Programming Policy:

The Air Force respondent felt the status quo would be maintained for the RDT&E Incremental Programming Policy.

The Navy respondent felt that if the RDT&E Incremental Programming Policy was not defined more clearly, costs could be saved by making RDT&E funds a one year appropriation. The respondent felt the RDT&E Incremental Programming Policy makes program management more difficult. The disbursement rate was seen by the respondent as a problem for RDT&E Program Managers. It was noted that disbursements are slow in entering the accounting system for various reasons (such as contract audits). As a result, RDT&E programs are vulnerable to funding reductions.

C. CHANGES TO THE RDT&E INCREMENTAL PROGRAMMING POLICY

1. Changes within Congress

Recent statements and testimony to Congressional Committees by the Comptroller General of the United States in regard to the RDT&E appropriation have been directed toward a change to a multiyear authorization process from the current annual process. In June 1981, the Comptroller General issued a report on a multiyear authorization process for RDT&E programs. The report was directed to the Congress and provided the following information:

a. Background

The legislative and executive branches of the government have been constrained by the time restrictions of the RDT&E authorization process. In turn, the lack of time creates a lack of adequate information for decision makers in the Legislative and Executive branches of government. The annual RDT&E authorization process has resulted in a negative effect on funding decisions and program goals.

b. Issues

The General Accounting Office (the Comptroller General) felt the following issues needed to be addressed:

- (1) Adequate information needs to be provided to Congress in order to establish priorities and plans for programs,
- (2) More long range planning should be conducted in order to evaluate long term policy alternatives,
- (3) The quality of information for cross Agency programs needs to be improved,
- (4) Program funding stability must be enhanced in order to efficiently use resources, and
- (5) The issue of how to budget for inflation for RDT&E programs must be resolved.

c. Changes

The General Accounting Office proposed that a multiyear authorization process be implemented for the RDT&E appropriation. Their assessment was that a multiyear authorization process would provide additional time to Congress and the Executive Branch. This would allow the time necessary to carry out national objectives.

In particular, the General Accounting Office felt that additional time would make it possible to address the issues previously outlined. A specific recommendation was made that a "rolling" multiyear authorization process be implemented. This process would always project authorizations a year beyond the current budget year.

2. Changes within the Department of Defense

At the time of this report, the Navy was in the process of rewriting the Navy Comptroller's Manual in regard to the Policy. The key issue within the Navy was whether the RDT&E Incremental Programming Policy applies to programming and funding. Personnel in the Office of the Comptroller of the Navy were interviewed to obtain information and their opinions about the RDT&E Incremental Programming Policy. The following information was provided:

a. Background

The RDT&E Incremental Programming Policy evolved due to the nature of work. A need for more control over programs resulted in the adoption of the RDT&E Incremental Programming Policy. The current environment was seen as favorable to Defense expenditures. As a result, RDT&E Program Managers may be tempted to ignore the RDT&E Incremental Programming Policy. However, the need to look at the future was seen as the answer to this perception. It was felt by the respondent that if expenditures for RDT&E programs is not disciplined, programs could face

funding losses. It was also felt lack of self discipline could lead to a more restrictive change to a one year RDT&E appropriation.

b. Issues

The respondents felt that the following issues need to be answered/clarified: (1) delays in the disbursement reporting system, (2) the valid ending obligation date for a twelve month funding increment, (3) year end "dumping" of funds, (4) extension of obligation dates, and (5) enforcement of the RDT&E Incremental Programming Policy.

c. Changes

As noted previously, the Navy was in the process of rewriting its interpretation of the Incremental Programming Policy. Additionally, the respondents indicated the Office of the Navy Comptroller has determined that non compliance with the RDT&E Incremental Programming Policy is an infraction of administrative policy and not a violation of R.S. 3678 (misuse of funds). The major change in process was a proposal that the RDT&E Incremental Programming Policy apply only to the programming process. Also, it is proposed that responsibility for compliance with the Policy be set at the Headquarters level of program management.

D. ANALYSIS OF TWO METHODS FOR FUNDING RDT&E PROGRAMS

There are several ways to plan and fund programs. Two basic ways that evolved from the "no year" funding concept discussed in Chapter I are the annual (incremental) and

multiple year methods. The incremental approach is to plan for a program for more than one year but to fund it on a yearly basis. As previously discussed, the Research, Development, Test and Evaluation programs are planned and funded in this manner. The multiple year method is to plan and to fund a program for more than one year. For example, the Department of Defense procurement programs are planned and funded in this manner. This method of funding is known as full funding.

Discussions of the two methods for funding RDT&E programs usually pivot around the advantages and disadvantages of incrementally funding the programs that carry out the goals and objectives the funds were appropriated for. Chapter I provided a brief discussion of the advantages and disadvantages of the incremental funding approach. A broader view of the issue is the conflict between Congressional administrative goals and Department of Defense program goals. The goals and objectives of the programs must be met and should not be affected by the manner in which the funds are planned or received. Also, administrative goals and objectives must also be taken into account in an analysis of the two methods for funding RDT&E programs. The Congressional "power of the purse" and public accountability for the expenditure of funds are strong forces in the expenditure of public monies for Research, Development, Test and Evaluation purposes.

The method of funding RDT&E programs would not be relevant if administrative goals and program goals did not conflict. The incremental funding approach is a method that the Congress felt would result in more Congressional control of the RDT&E appropriation and the programs funded by the appropriation. It is felt the full funding approach would let the Department of Defense Programs Managers have more control and flexibility in carrying out the program goals without the restrictions of administrative goals.

IV. CONCLUSIONS

A. GENERAL

(1) Alternatives to the RDT&E IPP (particularly full funding) are acceptable to Department of Defense in-house RDT&E funded Activities.

(2) The RDT&E IPP requires strict authorization and funding deadlines for the Congress and the Department of Defense.

(3) The decision as to whether full funding or incremental funding is appropriate depends on the goals and objectives desired.

(4) Pressures exist to change the RDT&E appropriation authorization process.

(5) The three major services show differences in responding to the RDT&E IPP; the Air Force has generally indicated there is no problem in living with the policy; the Army viewpoint varies according to the particular issue in relation to the policy; and the Navy is revising their interpretation of the policy.

B. IMPACT OF THE RDT&E INCREMENTAL PROGRAMMING POLICY

(1) The respondents to the survey indicated they understand the IPP although the large number of non responses to the questionnaires may have been due to lack of knowledge of the RDT&E IPP. Survey responses and

and headquarters interviews indicated a lack of understanding in the actual application of the policy.

(2) The RDT&E IPP inhibits flexibility to change program funding, planning, and the management of resources.

(3) Compliance with the RDT&E IPP is affected by factors beyond a manager's control.

(4) Alternatives to the policy (for example, full funding) are acceptable to financial managers.

(5) Communications and relationships within the RDT&E community surveyed are effected by the RDT&E IPP.

C. IMPLEMENTATION OF THE RDT&E INCREMENTAL PROGRAMMING POLICY

(1) The RDT&E IPP has been implemented within the Department of Defense in-house RDT&E Activities.

(2) Compliance with the policy is being actively monitored at RDT&E funded activities.

(3) Implementation guidance has been provided at the Headquarters and Activity levels.

D. SUMMARY

The RDT&E IPP was adopted as part of the evolutionary definition of the congressional "power of the purse." The intent of Congress was to control the expenditure of funds for research programs. The method for controlling the expenditures was to limit the RDT&E appropriation to a two year life and to further restrict the appropriation by releasing the funds in one year increments. The financial

managers and sponsors that would have to "live with" the IPP initially had objections to the IPP. The objections at that time were based on confusion as to what the policy really said and resistance to further control of the RDT&E appropriation. However, the policy was implemented and the three major Department of Defense services adopted operating regulations for the IPP.

In order to determine whether the IPP should be maintained, the stated purpose and actual operational use of the policy should be reviewed. The two main issues to be answered are: (1) Is the IPP effective in carrying out Congressional intent? (2) Is the IPP an efficient operational regulation?

Whether or not the congressional intent of reducing costs and promoting greater technical performance has been achieved can be assessed by a review of the application of the RDT&E IPP. As part of the application process for the RDT&E appropriation, the Congress must evaluate the long range strategic plans for the nation and must allocate a finite amount of resources between competing research programs. This is all within the time constraints dictated by the RDT&E appropriation process. The lack of adequate time for Congressional decisions has resulted in negative implications with respect to Congressional intentions. Long range planning, effective funding decisions, and program goals have suffered as a result of the IPP time constraints.

In turn, the operational application of the policy suffered as a result of the time constraints. The late receipt

of funds caused by Congressional delays in the RDT&E review process creates additional problems that subvert congressional intent. RDT&E programs that are planned in one year increments depend upon the timely receipt of funding in order to accomplish program tasks. Contractors and key technical personnel may be moved to other programs that do receive or have multiple year funding at the start of a fiscal year. Research into the incidence of RDT&E program funding delays would provide data on the cost of the delays. An assessment of the funding delays could include the frequency of personnel shifts, program slippage and other quantifiable costs created by the late receipt of RDT&E funds.

The actual determination of the effectiveness and efficiency of the IPP itself is difficult to quantify. Due to the intangible nature of the costs or benefits of the IPP, (such as opportunity costs) the assignment of expenditures or savings is impossible. However, interviews and the survey included in this report indicate specific areas that can be used to reflect the operational effectiveness and efficiency of this regulation. For example, this report indicated the loss of flexibility created by the IPP has resulted in additional costs to the government. Further study could determine the incidence of (and perhaps quantify) contract awards to more costly contractors that were caused by the reporting requirements of the IPP. The loss of flexibility created by the IPP has forced the operational

managers of research programs to violate the policy. Investigation into violations of the IPP could start with a review of audit reports. The evaluation of efficiency of the IPP could be determined by investigation into the reasons why the policy was violated.

Operational managers of research programs want an alternative to the IPP. This indicates a lack of efficiency inherent in the policy and a lack of effectiveness causing violations. A possible area for research would be an evaluation of the various alternatives possible for research program funding. Differences exist between the three major services in their application and reaction to the IPP. Further investigation of the causes of these differences could help determine possible alternatives to the policy. It may be possible that research programs should be funded differently for the three services. Another alternative would be the application of different funding policies within the various research categories. Various possibilities exist. One of these is that once a program has evolved from pure research (DOD category 6.1) into advanced development (DOD category 6.3), funding could be released for two years instead of one (or vice versa). The issue of whether or not operational restrictions are more desirable at the conceptual stage of a program or the refinement stage could be examined.

An expansion of the scope of this report to include agencies outside of the DOD could help determine the effectiveness and efficiency of this policy.

The original objections to the IPP made by financial managers and sponsors remain. The IPP is not meeting the intentions of Congress. The RDT&E IPP has resulted in a reduction to the operational effectiveness and efficiency of programs and their funding. Problems with the RDT&E IPP indicate the means of Congressional control over the RDT&E appropriation should be revised. This is necessary in order to minimize costs and maximize efficiency. The IPP should be revised or alternatives to the policy should be adopted.

APPENDIX A

RDT&E ACTIVITIES SURVEYED

DISTRIBUTION LIST FOR SPONSORS OF AIR FORCE ACTIVITIES

Commander
Aeronautical Systems Division
Wright Patterson AFB, OH. 45433

Commander
Electronic Systems Division
Hanscom AFB, MA. 01731

Commander
Space Division
Los Angeles AFB, CA. 90009

Commander
Space and Missile Division
Vandenberg AFB, CA. 93437

Commander
Ballistic Missile Office
Norton AFB, CA. 92409

Commander
Aerospace Medical Division
Brooks AFB, TX 78235

Commander
Aerospace Medical Division
Brooks AFB, TX 78235

Commander
Foreign Technology Division
Wright Patterson AFB, OH. 45433

DISTRIBUTION LIST FOR SPONSORS OF ARMY RDT&E ACTIVITIES

Chief of Engineers
Headquarters United States Army
Washington, D. C. 20314

Commander
USA Operational Test and Evaluation Agency
5600 Columbia Pike
Falls Church, VA. 22041

Commander
USA Computer Systems Command
Fort Belvoir, VA. 22060

Commander
USA Research Institute
5001 Eisenhower Ave.
Alexandria, VA. 22333

Commander
USA Training and Doctrine Command
Fort Monroe, VA. 23651

Ballistic Missile Defense Program Office
5001 Eisenhower Ave.
Alexandria, VA. 22333

Commander
USA Material Development and Readiness Command
5001 Eisenhower Ave.
Alexandria, VA. 22333

Commander
USA Armament Research and Development Command
Dover, N. J. 07801

Commander
USA Aviation Research and Development Command
P.O. Box 209
St. Louis, MO. 63166

Commander
USA Electronics R&D Command
2800 Powder Mill Rd.
Adelphia, MD. 20783

Commander
USA T&E Command
Aberdeen Proving Ground, MD. 21005

Commander
USA Missile Command
Huntsville, AL. 35809

DISTRIBUTION LIST FOR SPONSORS OF NAVY RDT&E ACTIVITIES

Office of Naval Research
Ballston Tower Number 1, Room 924
800 No. Quincy Street
Arlington, VA. 22217
ATTN: Donald W. Rehorst (Code 500)

Marine Corps.
Arlington Annex, Room 3000
Arlington, VA. 20380
ATTN: Mr. E. T. Comstock (MC-FD)

Naval Material Command
Crystal Plaza 5, Room 1124
2211 Jefferson Davis Highway
Arlington, VA. 20360
ATTN: Mr. C. D. Lee (Mat 011)

Naval Medical Research and Development Command
National Naval Medical Center, Bldg. 142
8901 Wisconsin Avenue
Bethesda, MD. 20014
ATTN: Lt. Dan Ford (Code 10)

Naval Air Systems Command
Jefferson Plaza 1, Room 1114
1411 Jefferson Davis Highway
Arlington, VA. 20360
ATTN: Capt. D. L. McCarthy (Air 08)

Naval Sea Systems Command
National Center 3, Room 12E24
2531 Jefferson Davis Highway
Arlington, VA. 20360
ATTN: RADM. D. L. Cooper (Sea 01)

Naval Electronic Systems Command
National Center 1, Room 9N20
2511 Jefferson Davis Highway
Arlington, VA. 20360
ATTN: Capt. Donald Boyden (Elex 102)

Naval Supply Systems Command
Crystal Mall 3, Room 730
1931 Jefferson Davis Highway
Arlington, VA. 20376
ATTN: Capt. W. E. Kruse (Sup 01)

Naval Facility Engineering Command
Hoffman Building 2, Room 11N19
200 Stovall Street
Alexandria, VA. 22332
ATTN: Capt. N. W. Peterson (Code 01)

Strategic Systems Project Office (PM 1)
Crystal Mall 3, Room 1042
1931 Jefferson Davis Highway
Arlington, VA. 20376
ATTN: John E. Berkowski (SP 13)

Trident (PM 2)
National Center 3, Room 7W66
2531 Jefferson Davis Highway
Arlington, VA. 20362
ATTN: RADM J. D. Murraray (PM 2 00)

AIR FORCE IN HOUSE R&D CENTERS OVER \$25M

Comptroller
AERO Propulsion Lab
Wright Patterson AFB, OH. 45433

Comptroller
Armament Division
Eglin AFB, FL. 32542

Comptroller
Arnold Engrg Dev Ctr
Tullahoma, TN. 37388

Comptroller
Avionics Laboratory
Wright Patterson AFB, OH. 45433

Comptroller
Flight Dynamics Lab
Wright Patterson AFB, OH. 45433

Comptroller
Flight Test Center
Edwards AFB, CA. 93523

Comptroller
Geophysics Lab
Hanscom AFB, MA. 01731

Comptroller
Materials Lab
Wright Patterson AFB, OH. 45433

Comptroller
Office of Scientific Research
Bowling AFB, WASH D. C. 20332

Comptroller
Rocket Proplnsn Lab
Edwards AFB, CA. 93523

Comptroller
Rome Air Devlpmt Ctr
Griffiss AFB, N.Y. 13441

Comptroller
Weapons Laboratory
Kirtland AFB, N.M. 87117

Comptroller
4950 Test Wing
Wright Patterson AFB, OH. 45433

ARMY IN HOUSE R&D CENTERS OVER \$25M

Comptroller
Army Research Office, Triangle Park
Durham, North Carolina 277

Comptroller
Avin Res & Tech Lab
Moffett Field, CA 94035
ATTN: Dr. Carlson or Col. Fitch

Comptroller
Ballistic Research Lab
Aberdeen Proving Ground, MD. 21005

Comptroller
Chemical Systems Lab
Aberdeen Proving Ground, MD 21005

Comptroller
Combat Surv & Tgt Acq Lab
Ft. Monmouth, N. J. 07703

Comptroller
Communications R&D Command
Ft. Monmouth, N. J. 07703

Comptroller
Electronics Tech. & Devices Lab
Ft. Monmouth, N. J. 07703

Comptroller
Engr Topgphc Lab
Ft. Belvoir, VA. 22060

Comptroller
Res Inst Beh&Soc Sci
Washington, D. C.

Comptroller
Tank Auto R&D Command
Warren, MI. 48090

Comptroller
Harry Diamond Labs
Washington, D. C. 20783

Kwajalein Missile Range
Marshall Islands
APO San Francisco

Comptroller
Large Cal Wpns Sys Lab
Dover, N. J. 07801

Comptroller
Mtls&Mechncs Res Ctr
Watertown, MA. 02172

Comptroller
Matl Tstng Dir
Aberdeen Proving Ground, MD. 21005

Comptroller
Medical R&D Command
Ft. Detrick Frederick, MD. 21701

Comptroller
Missile Res&Dev Cmnd
Redstone Arsenal, AL. 35809

Comptroller
Mobility Eq R&D Cmnd
Ft. Belvoir, VA. 22060

Comptroller
Natick R&D Command
Natick, MA. 07160

Comptroller
Nght Vsn & Eo Lab
Ft. Belvoir, VA. 22060

Comptroller
White Sands Missile Rng
White Sands, N. M. 88002

Comptroller
Yuma Proving Grnd
Yuma, AZ. 85364

NAVY IN HOUSE R&D CENTERS OVER \$25M

Comptroller
Naval Air Development Ctr
Warminster, PA. 18974

Comptroller
Naval Air Propln Ctr
P.O. Box 7176
Trenton, N. J. 08628

Comptroller
Naval Air Test Center
Patuxent River, MD 20670

Comptroller
Naval Coastal Systems Center
Panama City, FL. 32407

Comptroller
David Taylor Ship R&D Ctr
Bethesda, MD. 20084

Comptroller
Naval Ocean R&D Activity
NSTL Station, MS 39529

Comptroller
Navl Ocean Systems Center
San Diego, CA. 92152

Comptroller
Pacific Missile Test Center
Point Mugu, CA. 93042

Comptroller
Naval Research Lab
Washington, D. C. 20375

Comptroller
Naval Surface Wpns Ctr
Dahlgren, VA. 22448

Comptroller
Naval Undersea Ranges Dept
Newport, R. I. 02840

Comptroller
Naval Underwater Systems Ctr
Newport, R. I. 02840

Comptroller
Naval Weapons Center
China Lake, CA. 93555

APPENDIX B
QUESTIONNAIRES

QUESTIONNAIRE FOR ASSESSMENT OF THE IMPACT OF THE RDT&E INCREMENTAL PROGRAMMING
POLICY (RDT&E IPP) ON SPONSORS OF RDT&E ACTIVITIES

Purpose: This questionnaire is part of a project being done by Carolyn Merlo, currently studying financial management. Miss Merlo's research consists of:

- a. Analysis of how the RDT&E Incremental Programming Policy has been implemented at RDT&E activities;
- b. Assessment of whether planning, budgeting, and program execution at the activities have changed;
- c. Assessment of the impact (if any) of the RDT&E IPP on managers at the activities; and
- d. Assessment of the impact (if any) of the RDT&E IPP on sponsors of these activities.

The purpose of this questionnaire is to obtain your assessment of the impact (if any) that the RDT&E Incremental Programming Policy has had on you.

General Instructions: Please complete the questionnaire as soon as possible and return it in the attached envelope directly to Miss Merlo prior to 15 September 1981. Either a pen or pencil may be used to complete the questionnaire. Most of the questions and statements may be answered by simply placing an "X" in the appropriate box; other questions ask for written answers. You are encouraged to write additional comments whenever you wish to do so. The last page is provided for additional comments.

Specific Instructions: Beside each of the statements listed below, please indicate your opinion.

	Strongly Agree	Agree	Disagree	Strongly Disagree	Do Not Know
1.(1) I understand the RDT&E IPP.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.(13) In your opinion, a full funding policy is preferable to the RDT&E IPP.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.(18) The RDT&E IPP makes it easy to fund contractual effort.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.(19) The RDT&E IPP is a useful planning aid for you.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.(20) Knowledge of the RDT&E IPP is useful when you are developing plans for the outyears (the years beyond the budget year).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.(6) The ability of your activity to comply with the RDT&E IPP is often affected by factors beyond your control.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.(12) Many different rules for different situations often cause confusion in applying the RDT&E IPP.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.(21) The RDT&E IPP has provided you with useful information to use in planning and budgeting. (If so, please specify what information below).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. (8) In your opinion, alternatives to the RDT&E IPP are not acceptable. (If you disagree, please elaborate below).

Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree ☐ Do Not Know ☐

10. (10) What effect has the RDT&E IPP had on your relationships and communications with your program managers?

- a. Caused problems (please explain below). ☐
- b. Has had minimal effect. ☐
- c. Has improved relationships. ☐
- d. Greatly improved relationships and communications (please explain below). ☐
- e. Other (please explain below). ☐

11. (11) After several years of experience with the RDT&E IPP, your opinion is that the RDT&E IPP:

- a. Should be retained as is. ☐
- b. Should be retained, but modified. If so, please specify below. ☐
- c. Should be changed to a full funded program policy. ☐

Please enter the name the location of your activity: _____

Other Comments or information: Use this page for comments or suggestions if your comments relate to a specific item in this questionnaire, please show the question number. You are encouraged to discuss any subject which you feel would be of help in conducting this review.

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS QUESTIONNAIRE. PLEASE RETURN IT TO ME AT:

Miss Carolyn Merlo
SMC 1115
Naval Postgraduate School
Monterey, Ca. 93940

A pre-addressed return envelope has been enclosed.

Thanks again!

QUESTIONNAIRE FOR COMMANDER AND TECHNICAL DIRECTOR ASSESSMENTS
OF THE RDT&E INCREMENTAL PROGRAMMING POLICY (RDT&E IPP)

Purpose: The purpose of this questionnaire is to obtain your opinions as to what the impact (if any) of the RDT&E IPP has been upon you and your subordinate managers.

Instructions: Please complete the questionnaire and return it in the attached envelope as soon as possible, but no later than 15 September 1981. Either a pen or pencil may be used to complete the questionnaire. The statements may be answered by simply placing an "X" in the appropriate box. You may desire to add comments; therefore, the last page is provided for any additional comments.

Beside each of the statements listed below, please indicate your opinion.

- | | | | | | | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. (1) I understand the RDT&E IPP. | <input type="checkbox"/> | Strongly Agree | <input type="checkbox"/> | Agree | <input type="checkbox"/> | Disagree | <input type="checkbox"/> | Strongly Disagree | <input type="checkbox"/> | Do Not Know |
| 2. (2) The one year increments for planning and funding RDT&E effort encourages RDT&E funded activities to use more rigorous and refined budgeting and planning methods. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. (3) The RDT&E IPP takes away flexibility to change program plans and funding between fiscal years. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

	<input type="checkbox"/> Strongly Agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Strongly Disagree	<input type="checkbox"/> Do Not Know
4.(4) The RDT&E IPP is useful to you as Commanders/Technical Directors in managing your activity's resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.(5) Planning workload and costs in one year separate and discrete increments can result in benefits to RDT&E funded activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.(6) The ability of your activity to comply with the RDT&E IPP is often affected by factors beyond your control.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.(7) Infractions of the RDT&E IPP may be unavoidable. (If you agree, please elaborate below).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.(8) In your opinion, alternatives to the RDT&E IPP are not acceptable. (If you disagree, please elaborate below).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.(9) Relationships and communications within your activity have improved as a result of the RDT&E IPP.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10.(10) What effect has the RDT&E IPP had upon your relationships and communications with sponsors or customers?

a. Caused problems (please explain below).

b. Has had minimal effect.

c. Has improved relationships.

d. Greatly improved relationships and communications (please explain below).

e. Other (please explain below).



11.(11) After several years of experience with the RDT&E IPP, your opinion is that the RDT&E IPP:

a. Should be retained as is.

b. Should be retained but modified. (If so, please explain below).

c. Should be abandoned.

d. Undecided.

e. Other (please specify below).



75

Please enter the name and location of your activity:

Other Comments or Information: Use the next page to make any comments or suggestions. If your comments relate to a specific item in this questionnaire please show the question number. You are encouraged to discuss any subject which you feel would be of help in conducting this review. Also feel free to attach any materials which you feel would be of help.

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS QUESTIONNAIRE. PLEASE RETURN IT TO:

Miss Carolyn Merlo
SMC #1115
Naval Postgraduate School
Monterey, Ca. 93940

A pre-addressed return envelope has been enclosed.

Thanks again!

QUESTIONNAIRE FOR COST CENTER MANAGERS AND PROGRAM MANAGERS
ASSESSMENTS OF THE RDT&E INCREMENTAL PROGRAMMING POLICY (RDT&E IPP)

General Instructions: Please complete the questionnaire as soon as possible and return it in the attached envelope. Either a pen or pencil may be used to complete the questionnaire. Most of the questions and statements may be answered by simply placing an "X" in the appropriate box; others ask for written answers. You are encouraged to write additional comments whenever you wish to do so. The last page is provided for additional comments.

Specific Instructions: Beside each of the statements listed below, please indicate your opinion.

1. (1) I understand the RDT&E IPP.	<input type="checkbox"/>	Strongly Agree	<input type="checkbox"/>	Agree	<input type="checkbox"/>	Disagree	<input type="checkbox"/>	Strongly Disagree	<input type="checkbox"/>	Do Not Know
2. (13) In your opinion, a full funding policy is preferable to the RDT&E IPP.	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. (15) The RDT&E IPP takes away flexibility to plan and fund programs between fiscal years.	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. (4) The RDT&E IPP is useful to you as cost center managers and project managers in managing your cost center project.	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5.(5) Planning workload and costs in one year separate and discrete increments can result in benefits to RDT&E funded activities.

Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree ☐ Do Not Know ☐

6.(6) Your ability to comply with the RDT&E IPP is often affected by factors beyond your control.

☐ ☐ ☐ ☐ ☐

7.(12) Many different rules for different situations often cause confusion in applying the RDT&E IPP.

☐ ☐ ☐ ☐ ☐

8.(16) Approximately how much of your time is spent ensuring your cost center/project is funded in compliance with the RDT&E IPP?

- a. 0 - 10%
- b. 11 - 25%
- c. 26 - 50%
- d. over 51%

☐ ☐ ☐ ☐ ☐

9.(17) Have program managers in the systems commands (customers or sponsors) brought pressure upon you to shift project plans to match the availability of RDT&E funds?

- a. Yes, often
- b. Yes, sometimes.
- c. Rarely.
- d. Never.
- e. Do not know.

☐ ☐ ☐ ☐ ☐

10.(10) What effect has the RDT&E IPP had upon your relationships and communications with sponsors or customers?

- a. Caused problems (please explain below).
- b. Has had minimal effect (please explain below).
- c. Has improved relationships and communications (please explain below).
- d. Greatly improved relationships and communications (please explain below).
- e. Other (please explain below).



11.(11) After several years of experience with the RDT&E IPP, your opinion is that the RDT&E IPP:

- a. Should be retained as is.
- b. Should be retained but modified. (If so, please explain below).
- c. Should be abandoned.
- d. Undecided.
- e. Other (please specify below).



Please enter the name and location of your activity: _____

Other comments or Information: Use the attached page to make any comments or suggestions. If your comments relate to a specific item in this questionnaire, please show the question number. Feel free to discuss any subject which you feel would be of help in conducting the survey. Also feel free to attach any materials you desire.

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS QUESTIONNAIRE. PLEASE RETURN IT TO:

Miss Carolyn Merlo
SMC #1115
Naval Postgraduate School
Monterey, Ca. 93940

A pre-addressed return envelope has been enclosed.

Thanks again!

QUESTIONNAIRE FOR COMPTROLLER DEPARTMENT ASSESSMENTS OF THE

RD&E INCREMENTAL PROGRAMMING POLICY (RD&E IPP)

General Instructions: Please complete the questionnaire and return it in the attached envelope as soon as possible. Either a pen or pencil may be used to complete the questionnaire. Most of the statements may be answered by simply placing an "X" in the appropriate box; other questions ask for written answers. You are encouraged to write additional comments whenever you wish to do so. The last page is provided for additional comments.

Specific Instructions: Beside each of the statements listed below, please indicate your opinion.

79

1.(12) Many different rules for different situations often cause confusion in applying the RD&E IPP.

2.(13) In your opinion, a full funding policy is preferable to the RD&E IPP.

3.(3) The RD&E IPP takes away flexibility to change program plans and funding between fiscal years.

4.(14) Compliance with the RD&E IPP has resulted in the following change in workload.

- Decreased workload.
- Has had no effect.
- Increased workload.
- Other (please specify below).

Strongly Agree	Agree	Disagree	Strongly Disagree	Do Not Know
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Strongly Agree	Agree	Disagree	Strongly Disagree	Do Not Know
5.(5) Planning workload and costs in one year separate and discrete increments can result in benefits to RDT&E funded activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.(16) The ability of your activity to comply with the RDT&E IPP is often affected by factors beyond your control.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.(7) Infractions of the RDT&E IPP may be unavoidable. (If you agree, please elaborate below).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.(8) In your opinion, alternatives to the RDT&E IPP are not acceptable. (If you disagree, please elaborate below).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.(9) Relationships and communications within your activity have improved as a result of the RDT&E IPP.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.(10) What effect has the RDT&E IPP had upon your relationships and communications with your activity's managers?					
a. Caused problems (please specify below).				<input type="checkbox"/>	<input type="checkbox"/>
b. Has had minimal effect.				<input type="checkbox"/>	<input type="checkbox"/>
c. Has improved relationships and communications (please explain below).				<input type="checkbox"/>	<input type="checkbox"/>
d. Greatly improved relationships and communications (please explain below).				<input type="checkbox"/>	<input type="checkbox"/>
e. Other (please specify below).				<input type="checkbox"/>	<input type="checkbox"/>

11.(11) After several years of experience with the RDT&E, your opinion is that the RDT&E IPP,

- a. Should be retained as is.
- b. Should be retained but modified. (If so, please explain below).
- c. Should be abandoned.
- d. Undecided.
- e. Other (please specify below).



Please enter the name and location of your activity: _____

Other Comments or Information: Use this page to make any comments or suggestions. If your comments relate to a specific item in this questionnaire, please show the question number. You are encouraged to discuss any subject which you feel would be of help in conducting this review. Also feel free to attach any materials which you feel would be of help.

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS QUESTIONNAIRE. PLEASE RETURN IT TO:

Miss Carolyn Merlo
SMC #1115
Naval Postgraduate School
Monterey, Ca. 93940

A pre-addressed return envelope has been enclosed.

Thanks again!

QUESTIONNAIRE FOR ASSESSMENT OF RDT&E ACTIVITY IMPLEMENTATION

OF THE RDT&E INCREMENTAL PROGRAMMING POLICY (RDT&E IPP)

Purpose: The purpose of this questionnaire is to obtain information on how your activity implemented the RDT&E IPP. Only one person at your activity needs to fill out this questionnaire.

General Instructions: The Budget Officer, Accounting Officer, or other appropriate analyst or accountant in the Comptroller Department is requested to complete this questionnaire and return it in the attached envelope as soon as possible. Either a pen or pencil may be used to complete the questionnaire. Most of the questions may be answered by simply placing an "X" in the appropriate box or by providing short answers. You are encouraged to write in additional comments whenever you wish to do so. The last page is provided for additional comments.

Specific Instructions: Beside each of the questions listed below, indicate yes, no, or do not know.

	<u>YES</u>	<u>NO</u>	<u>DO NOT KNOW</u>
1.(41) Is compliance with the RDT&E IPP monitored at your activity by (check all that apply);	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. The accounting system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. The procurement system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. The program managers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Other (please explain below).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.(42) Was there anything about your activity that made implementation of the RDT&E IPP difficult? (If yes, please explain below).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DO NOT
KNOW

YES

NO

3.(43) Has implementation of the RDT&E IPP changed how your activity prepares budgets? (If yes, please explain below).

☐
☐
☐

4.(44) Has your major claimant provided guidance (instructions) on the RDT&E IPP?

☐
☐
☐

5.(45) Has your activity provided guidance (instructions) for compliance with the RDT&E IPP to:
a. Program managers.
b. Cost center managers.
c. Other (please specify below).

☐
☐
☐
☐
☐
☐
☐
☐
☐

6.(46) Has compliance with the RDT&E IPP resulted in additional cost to:
a. Overhead?
b. Direct programs?

☐
☐
☐
☐
☐
☐

7.(47) Has your activity been cited for failure to comply with administrative regulations applicable to the RDT&E IPP? (If no or do not know, skip to Question 9).

☐
☐
☐

8.(48) If your activity has been cited for failure to comply with administrative regulations applicable to the RDT&E IPP, the failure was caused by: (check all that apply)
a. Late receipt of funds?
b. Lack of knowledge of the RDT&E IPP?

☐
☐
☐
☐
☐
☐

DO NOT
KNOW

NO

YES

- c. Cost overruns? ☐
- d. Differing interpretations of the RDT&E IPP? ☐
- e. Other (please specify below)? ☐

9.(49) Has the Planning Programming, Budgeting System (PPBS) at your activity has improved with the implementation of the RDT&E IPP? ☐

10.(50) What percentage of your funding is provided by the RDT&E appropriation during Fiscal Year 1981? ☐

0-19% ☐ 20-39% ☐ 40-59% ☐ 60-79% ☐ 80-100% ☐

IF POSSIBLE, PLEASE ATTACH A COPY OF YOUR ACTIVITY'S IMPLEMENTING GUIDANCE FOR THE RDT&E IPP.

Please enter the name the location of your activity: _____

Other Comments or Information: Use this page to make any comments or suggestions. If your comments relate to a specific item in this questionnaire, please show the question number. Feel free to attach any materials which you feel would be of help.

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS QUESTIONNAIRE. PLEASE RETURN IT TO:

Miss Carolyn Merlo
SMC #1115
Naval Postgraduate School
Monterey, Ca. 93940

A pre-addressed return envelope has been enclosed. Thanks again!

APPENDIX C

QUESTIONNAIRE RESPONSES BY SERVICE

QUESTIONS UNIQUE TO RDT&E FINANCIAL MANAGERS

		Frequency of Responses (percent)			
	N	AF A/D	AR A/D	NV A/D	
Ques02 The IPP encourages RDT&E activities to use more rigorous/refined budgeting/planning methods.	26	38/62	69/23	20/80	
Ques03 The RDT&E IPP takes away flexibility to change program plans and funding between fiscal years.	46	42/58	65/30	82/18	
Ques04 The RDT&E is useful to you in managing your activity's resources.	128	33/57	28/66	18/73	
Ques05 Planning in one year increments can result in benefits to RDT&E funded activities.	147	38/53	33/57	24/61	
Ques07 Infractions of the policy may be unavoidable.	45	58/33	46/36	82/18	
Ques09 Relationships and Communications within your activity have improved as a result of IPP.	46	8/67	26/52	9/82	
Ques15 The IPP takes away flexibility to plan and fund programs between fiscal years.	102	64/18	75/21	71/18	
Ques14 Compliance has resulted in the following change to workload: (N=20)					
		No effect	25	10	33
		Increase	75	70	67
Ques16 Approximately how much of your time is spent ensuring compliance with the policy? (N=99)					
		Up to 25%	86	84	85
		Over 25%	14	16	15
Ques17 Have sponsors pressured you to change project plans to match the availability of RDT&E funds? (N=101)					
		Yes, often	67	52	46
		Yes, sometimes	19	29	25
		Rarely	5	12	4
	85				

QUESTIONNAIRE RESPONSES BY SERVICES

QUESTIONS UNIQUE TO RDT&E SPONSORS/ADMINISTRATORS

	Frequency of Responses (percent)			
	N	AF A/D	AR A/D	NV A/D
Ques18 The RDT&E IPP makes it easy to fund contractual effort.	56	47/53	36/54	15/69
Ques19 The RDT&E IPP is a useful planning aid for you.	55	43/57	61/32	39/46
Ques20 Knowledge of the RDT&E IPP is useful when you are developing plans for the outyears.	56	87/13	75/21	54/31
Ques21 The RDT&E IPP has provided you with useful information to use in planning and budgeting.	54	31/62	36/50	38/39

QUESTIONNAIRE RESPONSES BY SERVICES

QUESTIONS COMMON TO RDT&E FINANCIAL MANAGERS AND SPONSORS

		Frequency of Responses (percent)			
		N	AF A/D	AR A/D	NV A/D
Ques01	I understand the RDT&E IPP.	186	86/ 9	87/ 6	77/19
Ques06	The ability of your activity to comply is often affected by factors beyond your control.	204	69/25	84/13	87/ 4
Ques08	In your opinion, alternatives to the RDT&E IPP are not acceptable.	101	41/59	36/42	8/63
Ques12	Many different rules for cause confusion in applying the RDT&E IPP.	178	66/24	77/12	72/17
Ques13	A full funding policy is preferable to the RDT&E IPP.	177	56/37	65/31	60/32
Ques10	What effect has the IPP had upon relationships and communications?				
			N=47	N=101	N=50
	Caused problems		38	38	52
	Minimal effect		49	46	32
	Improved them		6	10	4
Ques11	After several years of experience with the IPP, your opinion is that it:				
			N=47	N=101	N=48
	Should be retained as is		21	23	21
	Retain, but modify it		23	24	29
	Abandon it		43	41	42

QUESTIONNAIRE RESPONSES BY SERVICES

QUESTIONS UNIQUE TO RDT&E FINANCIAL IMPLEMENTORS

	Frequency of Responses (percent)		
	AF Y/N	AR Y/N	NV Y/N
Ques42 Was there anything about your activity that made implementation of the RDT&E IPP difficult?	29/71	33/67	50/33
Ques43 Has implementation of the IPP changed how your activity prepares budgets?	14/86	50/50	17/83
Ques44 Has your major claimant provided guidance on the RDT&E IPP?	86/14	100/	83/17
Ques47 Has your activity been cited for failure to comply with the IPP?	29/71	17/67	33/67
Ques49 Has the PPBS System improved at your activity with implementation of the RDT&E IPP?	14/57	17/50	/100

APPENDIX D

QUESTIONNAIRE RESPONSE RATES BY SERVICE

	Frequency of Response (percent)		
	Air Force	Army	Navy
Financial Managers	21.8	26.2	22.0
Sponsors/Administrators	25.0	25.5	12.7
Financial Implementors	58.3	39.1	42.9
TOTAL (Overall)	24.6	26.0	19.6

	Frequency of Response (percent)		
	Air Force	Army	Navy
Financial Managers	34/156	78/298	40/182
Sponsors/Administrators	15/ 60	28/110	14/110
Financial Implementors	7/ 12	6/ 23	6/ 14
TOTAL	56/228	112/431	60/306

LIST OF REFERENCES

1. Dancy, Albert Guy Sr., Effects of Congressional Funding Limitations on Research and Development for Major Defense Systems, Ph.D. Thesis, George Washington University, Washington, D. C., 1975.
2. Constitution of the United States of America Annotated, U.S. Government Printing Office, 1964.
3. Senate Reports, 92d Congress, 1st Session, Vol 1-3, U. S. Government Printing Office, 1971.

INITIAL DISTRIBUTION LIST

	No. Copies
1. Defense Technical Information Center Cameron Station Alexandria, Virginia 22314	2
2. Library, Code 0142 Naval Postgraduate School Monterey, California 93940	2
3. Associate Professor D. Whipple Code 54Wp Department of Administrative Science Naval Postgraduate School Monterey, California 93940	1
4. Associate Professor R. Harris Code 54He Department of Administrative Science Naval Postgraduate School Monterey, California 93940	1
5. Department Chairman, Code 54 Department of Administrative Sciences Naval Postgraduate School Monterey, California 93940	1
6. Miss Caroyne Merlo 928 19th Street Pacific Grove, California 93950	2
7. Commander (Code 08) Naval Weapons Center China Lake, California 93555	1
8. Headquarters USAF ACBID, Attn: Gene Winton Pentagon, Washington, D. C. 20030	1
9. Headquarters, Dept. of the Army Office of Deputy Chief of Staff Research, Dev and Acq DAMA-PPR Attn: Col. Huggin Washington, D. C. 20310	1
10. Deputy Comptroller (Attn: Tom Leckey) Office of Naval Research 800 N. Quincy St. Arlington, Virginia 22217	1

11. Office of Navy Comptroller 1
NCB2 Attn: Cdr. Matton
Washington, D. C. 20850
12. Chief of Naval Material 1
MAT 08T Attn: Ted Huang
Washington, D. C. 20000
13. AFWAL/ACD 1
Attn: Paul A. Shahady
Wright Patterson AFB, Ohio 45433
14. Director (RW 04) 1
Rotary Wing Aircraft Test Directorate
Naval Air Test Center
Patuxent River, Maryland 20670